

DETAILED ACTION

1. This Office Action is in response to the amendment filed on June 24, 2009.
2. Claims 1 and 3-14 are pending.

Response to Arguments

3. Applicant's arguments filed 06/24/2009 with regards to Claims 1 and 11, page 8 paragraph 2, have been fully considered but they are not persuasive. The Applicant argues that the unit for measuring reception performance of a client apparatus is not disposed within the traffic control apparatus. The Examiner notes that the purpose of said unit is to measure the reception performance of the client. Whether said unit is physically placed within the traffic control apparatus or connected externally, inside the client is irrelevant as the function of measuring reception performance as claimed still remains the same.

4. Applicant's arguments with respect to Claims 1 and 3-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2456

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 1, 5-6 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1).

As to **Claims 1 and 11**, *Peiffer* discloses a traffic control apparatus (**Connection Management Device 20, Figure 1, 3-4**) for controlling traffic between a plurality of client apparatuses (**12, Figure 1, 3-4**) and a server apparatus (**Server 14, Figure 1, 3**) in a service system including the plurality of client apparatuses for issuing service requests to the server apparatus and the server apparatus for receiving the service requests from the client apparatuses to provide the service (**see figures 1, 3, 4; column 3, lines 26-33 and column 5, lines 41-5**), comprising:

a unit for receiving the service requests from the client apparatuses to the server apparatus (**Column 3, Lines 27-33**);

a unit for receiving a reply sent from the server apparatus in response to the service request (**Column 3, Lines 27-33**)

a unit for controlling the number of client apparatuses simultaneously connected to the server apparatus (**Figures 1,3, 6-8; Column 6, Lines 58-60 and Paragraph bridging Column 7 and 8**);

wherein the unit for controlling changes the number of client apparatuses simultaneously connected to the server apparatus, dynamically (**Client connections are dynamically opened and closed based on monitored performance metrics**

Art Unit: 2456

(Column 6, Lines 7-14); and

a unit for relaying requests to the server apparatus with regard to the service requests received from the plurality of client apparatuses in accordance with the number of simultaneously connected client apparatuses **(Figures 1, 3-4, 6-7; Column 4, Lines 23-34 and Column 6, Lines 47-60; Column 7, Lines 19-31);**

However, *Peiffer* does not expressly disclose a unit for measuring reception performance of a client apparatus at intervals of time and controlling the number of client apparatuses connected in accordance with reception performance of the client apparatus.

Klien, in the same field of endeavor, teaches a unit for measuring reception performance of a client apparatus at intervals of time **(Each interval of time, client event activation through client event completion, is measured. Figure 2; Column 7, Lines 26-54 and paragraph bridging Columns 7 and 8).**

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the traffic control apparatus including controlling the number of client apparatuses connected to the server using server performance as taught by *Peiffer* with using the client measuring unit as taught by *Klien* to control the number of connected clients using client performance. The motivation would have been allow the traffic control apparatus to not only to control connections based on server performance, but to control connections based on client performance in order to improve total overall system performance.

As to **Claim 5**, *Klien-Peiffer* further discloses a client performance measurement unit for observing time that the client apparatus receives the service reply to calculate the data reception performance of the client apparatus (***Klien*; Column 7, Lines 26-54**).

As to **Claim 6**, *Klien-Peiffer* further discloses a client performance measurement unit for observing time that the server apparatus sends the service reply to calculate the data reception performance of the client apparatus (***Klien*; Column 7, Lines 26-54**).

7. **Claims 3, 10, 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,007,092 B2 to *Peiffer* in view of *Klein* (U.S. Patent No. 6,917,971 B1) in further view of *Agrawal* (U.S. Patent No. 6,606,661 B1).

As to **Claim 3**, *Peiffer-Klien* discloses a traffic control apparatus according to Claim 1. *Peiffer-Klien* does not expressly disclose a unit for estimating a waiting time and for sending an access restriction message.

Agrawal discloses a unit for estimating a waiting time of the reply supplied by the server apparatus (**MTBR, Column 4, Lines 50-54**); and a unit for sending an access restriction message for rejecting the request when the waiting time is longer than a fixed time (**Column 5, Lines 14-15**).

Peiffer and *Agrawal* are analogous art because they are from the same field of endeavor with respect to traffic control apparatuses.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of *Peiffer* and *Agrawal* to include a unit for restricting

Art Unit: 2456

access of the client request when the wait time is too great. The motivation would have been to service the largest possible number of clients without running out of resources **(Column 2, Lines 34-42)**.

As to **Claim 10**, *Agrawal-Peiffer-Klien* further discloses a unit for providing a maximum processing time of the request to the client apparatus before the request is transferred to the server apparatus **(Agrawal; Tmax, Column 4, Lines 34-38)**.

As to **Claim 13**, *Agrawal-Peiffer-Klien* further discloses a unit for controlling an average response time to the client apparatus within a fixed time **(Agrawal; G(T), Column 4, Lines 18-30)**.

As to **Claim 14**, *Agrawal-Peiffer-Klien* further discloses a unit for providing a maximum processing time of the request to the client apparatus before the request is transferred to the server apparatus **(Agrawal; Tmax, Column 4, Lines 34-38)**.

8. **Claims 4, 7-9, and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1) and further in view of *Miyamoto* (U.S. Patent No. 6,101,542).

As to **Claim 4**, *Peiffer-Klien* discloses a traffic control apparatus according to Claim 1. *Peiffer-Klien* does not expressly disclose a unit for changing priority of the requests. *Miyamoto* discloses a unit for changing priority used to relay the request to

Art Unit: 2456

the server apparatus in accordance with the data reception performance of the client apparatus (**Column 10, Lines 61-64**).

Peiffer-Klien and *Miyamoto* are analogous art because they are from the same field of endeavor with respect to traffic control apparatuses.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of *Peiffer-Klien* and *Miyamoto* to include a unit for prioritizing client requests. The motivation would have been to match the client performance with the performance of the connection from the server apparatus (**Column 4, Lines 7-11**).

As to **Claim 7**, *Miyamoto-Peiffer-Klien* further discloses a unit for making access restriction on the request already received from the client apparatus when priority of the request received later is higher than that of the already received request (***Miyamoto*; Column 12, Lines 21-25**).

As to **Claim 8**, *Miyamoto-Peiffer-Klien* further discloses a unit for changing priority of the request relayed to the server apparatus in accordance with the data reception performance of the client apparatus (***Miyamoto*; Column 10, Lines 61-64**).

As to **Claim 9**, *Miyamoto-Peiffer-Klien* further discloses a unit for controlling an average response time to the client apparatus within a fixed time (***Miyamoto*; Column 3, Paragraph 3-4**

As to **Claim 12**, *Miyamoto-Peiffer-Klien* further discloses a unit for changing priority of the request relayed to the server apparatus in accordance with the data reception performance of the client apparatus (***Miyamoto***; **Column 10, Lines 61-64**).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ROBERT B. MCADAMS** whose telephone number is

Art Unit: 2456

(571)270-3309. The examiner can normally be reached on Monday-Thursday 6:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. B. M./
Examiner, Art Unit 2456

/Bunjob Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2456